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## DIE SUPPLANTS CUT-OFF IN TOOL-MAKING

Until June 1947 blanks for welded built-up cutting tools were shaped on lathes and mechanical saws at the Gor'kiy Auto Plant. It became evident at that time that the eight lathes in the shop which did this job were not up to the capacity demanded by the tool shop. The eight cut-off lathes had a group capacity of 400-500 pieces per shift.

To supplant this method of making tool blanks, the senior technologist of the shop, T. Ye. Chufarkii, designed a die with interchangeable blades for cutting out blanks from tool steel. The die guarantees perpendicularity of cut to the axis of the blank so that the tools can be welded without further machining.

This die, used in a 125-ton press, can cut blanks up to 30 millimeters in diameter. The blades in the die, after cutting 17,000 parts, still grind to a tolerance of 0.1-0.2 millimeters. Their useful life cannot yet be determined since they are still in use and have been reground a number of times.

The optimum temperature for cutting high-speed tool steel in the die press was found to be 700 degrees centigrade.

The output of the die per shift is about 5,000 pieces. The eight lathes were thus freed for other work, and 80,000 rubles were saved.

This method proved so successful that another die was made for use in a 400-ton friction press. This cuts blanks from 30 to 60 millimeters in size. The productivity of the press is 1,500 pieces per shift.

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